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Ms. Kristen Hanson Lac du Flambeau Band of Lake Superior Chippewa Indians Environmental Response Program 14258 State Highway 70W Lac du Flambeau, WI 54538

August 6, 2014

Sent via email: ldfbrownfields@frontier.com

RE: Summary of Findings

June 2014 Vertical Aquifer Sampling

Haskell Lake Area Groundwater Investigation

Dear Ms. Hanson:

Weston Solutions, Inc. (WESTON®) has prepared this letter and associated maps and table to describe the completed scope of work (SOW) and findings pertaining to the characterization of groundwater quality at four new vertical aquifer sampling (VAS) locations at the Haskell Lake Area Groundwater Investigation site (the Site) in Lac Du Flambeau, Vilas County, Wisconsin. Per our May 23, 2014 SOW letter, WESTON conducted VAS at these locations on June 26 and 27, 2014 to more fully characterize the groundwater chemistry for petroleum-related volatile organic compounds (VOCs), with a focus on establishing the relative risks to drinking water wells, Haskell Lake, and the unnamed pond at the Site. WESTON performed this work for the Lac du Flambeau Band of Lake Superior Chippewa Indians (Tribe). Field and analytical results from the December 2013 VAS effort, which were presented in WESTON's February 2014 Summary of Findings document, were used to plan the June 2014 VAS SOW. Portions of the February 2014 Summary of Findings document have been retained as applicable, with updates incorporated based on the June 2014 results.

## **Summary of December 2013 Investigative Findings**

The December 2013 VAS results for VAS-08 located approximately 70 feet (ft) east of the former Tower Standard Service Site underground storage tank (UST) basin (and more than 100 ft east of the former gasoline dispensers) showed that gasoline-related impacts to the unconfined aquifer extend from near the top of the water table to the top of bedrock approximately 61 ft below grade, with the highest zone of impact at approximately 25 ft below grade having more than 45,000 micrograms per liter (ug/L) of total petroleum VOCs.

The December 2013 VAS results for VAS-11 located approximately 350 ft southwest of the former Tower Standard Service Site UST basin and adjacent to the north shore of Haskell Lake showed that gasoline-related impacts to the unconfined aquifer also extend from the top of the water table to the top of bedrock approximately 56 ft below grade, with the highest zone of impact (including petroleum odors and a sheen) at approximately 40 ft below grade having more than 2,400 ug/L of total petroleum VOCs. In addition, the deepest sample at the top of the bedrock had more than 1,200 ug/l of total petroleum VOCs. Petroleum odors were observed in purged groundwater from all of the VAS-08 and VAS-11 intervals except the shallow-most intervals.

## **Site Description and Background**

The Site is located near the southeast corner of state Highway 70 West and County Road D in Lac du Flambeau, Vilas County, Wisconsin (Figure 1) in the southeast quarter of the southwest quarter (SE 1/4 of the